

AMENDMENTS TO THE ABSTRACT:

Please amend the Abstract as follows:

ABSTRACT OF THE DISCLOSURE

~~_____The invention considers a plurality of receiving nodes (120-1, 120-2 and 120-3)~~
~~such as base stations in a wireless network. Each receiving node (120) of a plurality of~~
receiving nodes (120-1, 120-2 and 120-3) such as base stations in a wireless network
converts a superposition of signals received from a plurality of transmitting nodes such as
mobile terminals (10) to produce soft complex signal information. ~~A basic idea according~~
~~to the invention is to collect t~~The soft complex signal information associated with the
considered plurality of receiving nodes are collected, for example in a central node (130)
and jointly detect signal information transmitted from at least a subset of the plurality of
transmitting nodes (10) based on the collected soft complex signal information. The
collected soft signal information generally retains phase and amplitude information, and
the transmitted signals are preferably detected in a joint detection process based on a
complex channel representation and collected soft signal information. In a truly
distributed realization, adjacent receiving nodes or base stations exchange soft complex
signal information with each other, thus forming at least partially overlapping groups for
distributed collection of information, detection and subsequent decoding in each base
station.